

CLAIMS

1. (Currently amended) An in-vehicle wireless communication system handset controller comprising:

a central processing unit;

an interface to an in-vehicle location information processing unit, the location information processing unit determining a geographical position of the in-vehicle wireless communication system and being connected to a wireless communication system handset, wherein, through the wireless communication system handset, the location information unit accesses a wide area computer network to communicate the geographical position and wherein the location information processing unit and the central processing unit are configured to each capable of taking control of the wireless communication handset;

an input unit comprising data input keys larger than keys on a keypad of the handset; and

an output unit comprising a display larger than a display of the handset, wherein displayed message text characters on the output unit display are larger than displayed message text characters on the handset display, and wherein, while the handset is operationally coupled to the handset controller and while the central processing unit has control of the handset, the central processing unit executes instructions which (a) allow the keys of the input unit to be used to provide input data to the handset, and ~~which~~ (b) output data for display on the handset on the output unit display.

2. (Previously presented) The handset controller of claim 1, wherein the location

information processing unit comprises a global positioning system chipset.

3. (Previously presented) The handset controller of claim 1, wherein short message service messages are input via the input unit and output through the output unit.

4. (Previously presented) The handset controller of claim 1, wherein an audible warning is issued when the handset is not operationally coupled to the handset controller.

5. (Previously presented) The handset controller of claim 1, wherein a warning is output if the handset is not operationally coupled to the handset controller and an engine of the vehicle is started.

6. (Previously presented) The handset controller of claim 1, wherein a warning is output if the handset is not operationally coupled to the handset controller and the vehicle begins to move.

7. (Original) The handset controller of claim 1, wherein the data input keys are backlighted.

8. (Original) The handset controller of claim 1, wherein the number of data input keys is larger than the number of keys on the handset keypad.

9. (Original) The handset controller of claim 1, wherein the display is backlighted.

10. (Original) The handset controller of claim 1, wherein the display comprises a heads-up display positioned such that a driver of the vehicle sees a displayed image while looking through a windshield of the vehicle.

11. (Original) The handset controller of claim 1, wherein the controller is rigidly

positioned in the interior of a motor vehicle to allow a driver of the vehicle, while seated in a driver's seat, to view messages on the display and to operate the data input keys.

12. (Previously presented) The handset controller of claim 1 further comprising a voice command input unit coupled to allow the user to cause the handset to dial a telephone number and to manage messages received by the handset.

13. (Original) The handset controller of claim 1 further comprising a voice synthesizer unit coupled to audibly output a message received by the handset.

14. (Original) The handset controller of claim 1, wherein the controller is coupled to the handset via a wireless communication link.

15. (Original) The handset controller of claim 1, wherein the handset is a cellular telephone handset.

16. (Original) The handset controller of claim 1 further comprising a power supply coupled to charge a battery in the handset.

17. (Currently amended) A method for controlling a wireless communication system handset, comprising the acts of:

providing an in-vehicle location processing unit that determines a geographical position and couples to a wireless communication handset, wherein the location processing unit, through the wireless communication handset, accesses a wide area network to communicate the geographical position; and

providing, in the location processing unit, an interface through which an in-vehicle controller may operationally couple to the wireless communication handset;

wherein, while the handset is operationally coupled to the in-vehicle controller, the in-vehicle controller carries out a method comprising:

(a) enabling keys on an input unit of the in-vehicle controller to receive input data for the handset, the keys on the controller being larger than keys on the handset; and

(b) displaying messages received by the handset on a display in an output unit of the handset controller, such that displayed message text characters are larger than message text characters displayed by the handset; and

(c) outputting a warning if the handset is not operationally coupled to the controller.

18. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising outputting the warning if an engine of the vehicle is started.

19. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising outputting the warning if the vehicle begins to move.

20. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising backlighting keys on the controller.

21. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising backlighting a display outputting the larger message text characters.

22. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising using a heads-up display to display the received messages.

23. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising the acts of enabling a voice interface on the in-vehicle controller to control the operations of the handset.

24. (Original) The method of claim 17 further comprising using a power supply in the controller to charge a battery in the handset.

25. (Previously presented) The method of claim 17 further comprising the acts of:

using the location processing unit to determine a geographic position of the vehicle; and

sending the determined position over the wire area network to a computer.

26. (Previously presented) The method of claim 17, the method carried out by the in-vehicle controller further comprising the acts of:

receiving a plurality of messages through the handset, wherein each unique received message is formatted by a corresponding unique sender in one of a plurality of communication protocols;

identifying the communication protocol and format of each received message; and

outputting each unique received message as formatted by each corresponding unique sender.

27. (Previously presented) The method of claim 26, wherein one of the received messages is a cargo pickup or delivery instruction to a driver of the vehicle.

28. (Currently amended) An in-vehicle wireless communication system handset controller comprising:

a central processing unit;

an interface to an in-vehicle location information processing unit, the location information processing unit determining a geographical position of the in-vehicle wireless communication system and being connected to a wireless communication system handset, wherein the location information processing unit, through the wireless communication system handset, accesses a wide area computer network to communicate the geographical position and wherein the location information processing unit and the central processing unit are configured to ~~each capable of taking control of~~ the wireless communication handset;

a memory comprising instructions executable by the central processing unit for interacting with the location information processing unit to operationally couple and to gain control of the wireless communication handset;

an input unit comprising data input keys larger than keys on a keypad of the handset; and

an output unit comprising a display larger than a display of the handset, wherein the display is configured to output a number of displayed message text characters larger than a number of displayed message text characters output on the handset display, and wherein, while the handset is operationally coupled to the handset

controller and while the central processing unit has control of the handset, the central processing unit executes instructions which (a) allow the keys of the input unit to be used to provide input data to the handset, and (b) ~~which~~ output messages for the handset on the output unit display.

29. (Previously presented) The handset controller of claim 28, wherein the location information processing unit comprises a global positioning system chipset coupled to the central processing unit.

30. (Original) The handset controller of claim 28, wherein at least a portion of the messages are short message service messages.

31. (Previously presented) The handset controller of claim 28, wherein an audible warning is issued if the handset is not operationally coupled to the handset controller.

32. (Previously presented) The handset controller of claim 28, wherein a warning is output if the handset is not operationally coupled to the handset controller and an engine of the vehicle is started.

33. (Previously presented) The handset controller of claim 28, wherein a warning is output if the handset is not operationally coupled to the handset controller and the vehicle begins to move.

34. (Original) The handset controller of claim 28, wherein the data input keys are backlighted.

35. (Original) The handset controller of claim 28, wherein the number of data input keys is larger than the number of keys on the handset keypad.

36. (Original) The handset controller of claim 28, wherein the display is backlighted.

37. (Original) The handset controller of claim 28, wherein the display comprises a heads-up display positioned such that a driver of the vehicle sees a displayed image while looking through a windshield of the vehicle.

38. (Original) The handset controller of claim 28, wherein the controller is rigidly positioned in the interior of a motor vehicle to allow a driver of the vehicle, while seated in a driver's seat, to view messages on the display and to operate the data input keys.

39. (Previously presented) The handset controller of claim 28 further comprising a voice command input unit coupled to allow the user to cause the handset to dial a telephone number and to manage messages received by the handset.

40. (Original) The handset controller of claim 28 further comprising a voice synthesizer unit coupled to audibly output a message received by the handset.

41. (Original) The handset controller of claim 28, wherein the controller is coupled to the handset via a wireless communication link.

42. (Original) The handset controller of claim 28, wherein the handset is a cellular telephone handset.

43. (Original) The handset controller of claim 28 further comprising a power supply coupled to charge a battery in the handset.

44. (Currently amended) A method for controlling a wireless communication system handset, comprising the acts of:

providing an in-vehicle location processing unit that determines a geographical position and couples to a wireless communication handset, wherein the location processing unit, through the wireless communication system handset, accesses a wide area network to communicate the geographical position;

providing, in the location processing unit, an interface through which an in-vehicle controller may operationally couple to the handset; and

executing computer instructions stored in a memory device of the in-vehicle controller to operationally couple the in-vehicle controller to the handset and to gain control of the handset; wherein, while the handset is operationally coupled to an in-vehicle controller, the in-vehicle controller carries out a method comprising:

(a) enabling keys on an input unit of an in-vehicle controller to receive input data for the handset, the keys on the controller being larger than keys on the handset; and

(b) displaying messages received by the handset on a display in an output unit of the handset controller, such that a number of displayed message text characters is larger than a number of displayed message text characters output on the handset display; and

(c) outputting a warning if the handset is not operationally coupled to the controller.

45. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising outputting the warning if an engine of the vehicle is started.

46. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising outputting the warning if the vehicle begins to move.

47. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising backlighting keys on the controller.

48. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising backlighting a display outputting the larger message text characters.

49. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising using a heads-up display to display the received messages.

50. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising the acts of:

enabling a voice interface on the handset controller to control the operations of the handset.

51. (Original) The method of claim 44 further comprising using a power supply in the controller to charge a battery in the handset.

52. (Previously presented) The method of claim 44 further comprising the acts of:

using the location information processing unit to determine a geographic position of the vehicle; and

sending the determined position over the wide area network to a computer.

53. (Previously presented) The method of claim 44, the method carried out by the in-vehicle controller further comprising the acts of:

receiving a plurality of messages through the handset, wherein each unique received message is formatted by a corresponding unique sender in one of a plurality of communication protocols;

identifying the communication protocol and format of each received message;
and

outputting each unique received message as formatted by each corresponding unique sender.

54. (Original) The method of claim 44, wherein one of the received messages is a cargo pickup or delivery instruction to a driver of the vehicle.